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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
NAJJAR, S

ART UNIT	PAPER NUMBER
2154	

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#9

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/494,553

Applicant(s)

ZOMBEK ET AL.

Examiner

Saleh Najjar

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Remail to Applicant
Because the 1st one
was mailed to
wrong address !
NA 4/6/01

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 17) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

1. This action is responsive to the application filed on January 31, 2000. Claims 1-10 are pending. Claims 1-10 represent an apparatus directed toward sending messages and receiving messages in a client server environment over multiple wireless networks.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear where the wireless network links exist with respect to the client, server, and gateway.

In claim 8, it is unclear at which network link the message segmentation occurs.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1, 2, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahopelto et al., U.S. Patent No. 5,970,059.

Ahopelto teaches the invention as claimed including a packet radio system and method for a protocol-independent routing of a data packet in a packet radio network

(see abstract).

As to claim 1, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols (see fig. 1, col. 4), comprising:

a client application executed by a client device (see fig. 1; col. 8, lines 15-25, Ahopelto discloses a mobile computer having a client application);

a server application executed by a back-end server, and a protocol gateway that encapsulates an underlying network protocol of the plurality of wireless networks, wherein the client application and the server application communicate messages with each other through the protocol gateway independent from the network protocol of the wireless network used for such communication (see fig. 1; col. 4; col. Lines 35-65; col. 7, lines 65-67; col. 8, lines 1-20, Ahopelto teaches a gateway support node that encapsulates a IPX data packet in a GPRS radio link protocol data packet and sends it to the radio interface of the wireless network, the gateway support nodes help deliver messages between a host connected to a data packet network and a mobile computer connected to a wireless network).

As to claim 2, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above, further including at least one message router that routes communicated messages between the protocol gateway and the backend server (see fig. 1; element "router").

As to claim 7, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 2 above, wherein the protocol gateway communicates with the message router via a TCP IP protocol (see col. 6, lines 55-60).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3-6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahopelto.

Ahopelto teaches the invention substantially as claimed including a packet radio system and method for a protocol-independent routing of a data packet in a packet radio network (see abstract).

As to claims 3-4, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 2 above.

Ahopelto does not explicitly disclose the claimed limitation wherein the message router authenticates the origin of the message using a data base having routing and authentication information, before routing of the message.

However, "Official Notice" is taken that the concept and advantages of authenticating the origin of the message at a router using a database containing routing

and authentication information is old and well known in the network communication art.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by incorporating the authentication of messages at the router to verify the identity of a process or a person prior to message delivery.

As to claim 5, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above.

Ahopelto does not explicitly disclose the claimed limitation further comprising a HTTP proxy server.

However, "official Notice" is taken that the concept and advantages of using a HTTP proxy server is old and well known in the IP network communication.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by including a proxy HTTP server in the packet data network disclosed by Ahopelto to provide a process for providing a cache of items available on other servers which are presumably slower or more expensive to access.

As to claim 6, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above.

Ahopelto does not teach a SNMP manager.

However, "Official Notice" is taken that the concept and advantages of using a SNMP manager is old and well known in the network management art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by including a SNMP manager in the Messaging system since SNMP is the Internet standard protocol, developed to manage nodes on an

IP network. One would be motivated to do so to manage and monitor all sorts of equipment including computers, routers, wiring hubs, toasters and jukeboxes.

As to claim 8, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above.

Ahopelto fails to teach the claimed limitation wherein the messages exceeding a predefined maximum size are segmented into multiple message segments.

However, "Official Notice" is taken that the concept and advantages of packet data segmentation is old and well known in the data processing art since it involves breaking an arbitrary size packet into smaller pieces at the transmitter.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by implementing segmentation at the transmitter since this may be necessary because of restrictions in the communications channel or to reduce latency. One would be motivated to do so since segmentation may be performed by a router when routing a packet to a network with a smaller maximum packet size.

As to claim 9, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above.

Ahopelto fails to teach the limitation wherein message retries are supported for different network protocols.

However, "Official Notice" is taken that the concept and advantages of using message retries in a network protocol to assure the receipt of the message data is old and well known in the computer communication art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by prespecifying message retries in the protocols

supported by the different networks implemented in Ahopelto to resend the current block of data a specified number of times, or until it is entered correctly or accepted.

As to claim 10, Ahopelto teaches a Messaging system for communicating messages in a client server environment over multiple wireless networks that support different network protocols as in claim 1 above.

Ahopelto fails to teach the claimed limitation wherein message ACK and NAK services are supported for the different network protocols.

However, "Official Notice" is taken that the concept and advantages of using ACK and NAK messages in network protocols to indicate that some data has been received correctly or not is old and well known in the Messaging network art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ahopelto by including ACK and NAK in the network protocols so that the original data will be sent again if ACK has not been after some predetermined time by the sender, or receives a NAK.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Method and system for managing service accessibility between differing radio telecommunications networks by Wild et al., U.S. Patent No. 5,862,480.
- Network address management for a wired network supporting wireless communication to a plurality of mobile users.
- Protocol converter and router for multi-mode wireless data communications by Barzegar et al., U.S. Patent No. 55,894,478.
- System and method for appending location information to a communication sent

from a mobile terminal operating in a wireless environment to an Internet server by Landgren et al., U.S. Patent No. 6,115,754.

- Wireless protocol method and system supporting transaction requests with variable length responses by Alfano et al., U.S. Patent No. 6,094,423.
- Network protocol method, access point device and peripheral for providing for an efficient centrally coordinated peer-to-peer wireless network by Cudak et al., U.S. Patent No. 6,058,106.
- System and method in which a proxy server translates information received from the Internet into a form/ format readily usable by low power portable computers.
- Shortcut layer routing for mobile hosts by Perkins et al., U.S. Patent No. 5,442,633.
- Communications system with radio device and server by Adler et al., U.S. Patent No. 6,157,630.
- Mobile portable wireless communication system by Spaur et. al., U.S. Patent No. 5,732,074.
- Use of transmission control protocol proxy within packet data service transmission in a wireless network by Anderson et al., U.S. Patent No. 6,061,341.
- Protocol converter for a wireless telecommunications system by Nethercott et al., U.S. Patent No. 5,809,028.
- Data gateway for mobile data radio terminals in a data communication network by Kamm et al., U.S. Patent No. 5,457,680.
- System for transmission of data flow in data communications network by Schaefer, U.S. Patent No. 5,961,607.

8. Any inquiry concerning this communication or earlier communications from the

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Art Unit 2154

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examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AN MENG AI, can be reached on (703) 305-9678. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.



Saleh Najjar

Examiner Art Unit 2154